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(54) Title: ARABIDOPSIS THALIANA DERIVED FRIGIDA GENE CONFERRING LATE FLOWERING

1 MSNYPPTVAA QPTTTANPLL QRHQSEQRRR ELPKIVETES TSMDITIGQS
51 KQPQFLKSID ELAAPSVAVE TFKRQFDDLQ KHIESIENAI DSKLESNGVV
101 LAARNNNFHQ PMLSPPRNNV SVETTIVTSQ PSQEIVPETS NKPEGGRMC
151 LMCSKGLRKY IYANISDQAK LMEEIPSALK LAKEPAKFVL DCIGKFYLGQ
201 RRAFTKESPM SSARQVSLLI LESFLLMPDR GKGKVKIESW IKDEAETA AV
251 AWRKRLMTEG GLAAAEKMDA RGLLLLACF GVPSNFRSTD LLDLIRMSG
301 NEIAGALKRS QFLVPMVSGI VESSIKRGMH IEALEMVYTF GMEDKFSAL
351 VLTSLKMSK ESFERAKRKA QSPLAPKEAA TKQLAVLSSV MQCMETHKLD
401 PAKELPGWQI KEQIVSLEKD TLQLDKEMEE KARSLSLMEE AALAKRMYNQ
451 QIKRPRLSM EMPPVTSSSY SPIYDRSFP SQRDDDDQDEI SALVSSYLGP
501 STSFPHRSRR SPEYMVPLPH GGLGRSVYAY EHLAPNSYSP GHGHLRHRQY
551 SPSLVHGQRH PLQYSPPING QQQLPYGIQR VYRHSPSEER YLGLSNQRSP
601 RSNSSLDPK

(57) Abstract: Disclosed are isolated nucleic acids obtainable from the FRI locus of plants which encode polypeptides capable of specifically altering, particularly delaying, the flowering time of a plant into which the nucleic acid is introduced. One preferred embodiment is the FRI nucleotide sequence which encodes the polypeptide of Fig 6 (see the sequence of Fig 5, particularly bases 362-2188 thereof) or sequences degeneratively equivalent to these. Also provided are variant sequences (e.g. alleles, orthologues, derivatives) and complementary sequences, plus vectors, host cells, plants and associated processes of production and methods of use e.g. for influencing or affecting flowering time in a plant by expression or suppression of FRI or variant sequences.

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